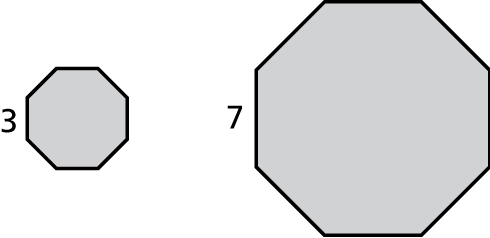
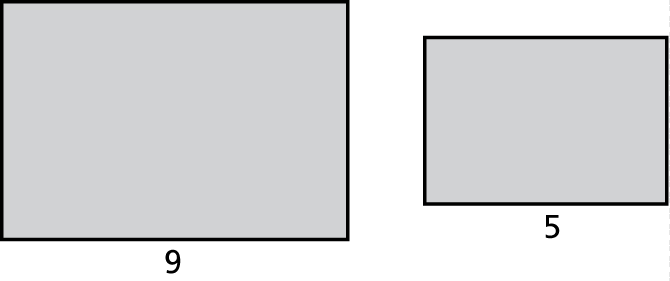
Name Date

Practice A

2.6

The two figures are similar. Find the ratio (small to large) of the perimeters and of the areas.

 1.  2.

3. How does doubling the side lengths of a triangle affect its area?

4. The ratio of the corresponding side lengths of two similar rectangular tables is 4 : 5.

a. What is the ratio of the perimeters?

b. What is the ratio of the areas?

c. The perimeter of the larger table is 44 feet. What is the perimeter of the smaller table?

5. The figures are similar. The ratio of the perimeters is 5 : 9. Find *x*.



6. The ratio of the area of Triangle *A* to Triangle *B* is 16 : 49. Triangle *A* is similar to Triangle *B*.

a. Which triangle is larger, *A* or *B*?

b. A side length of Triangle *B* is 3.5 inches. What is the corresponding side length of Triangle *A*?

c. What is the ratio of the perimeter of Triangle *A* to the perimeter of Triangle *B*?

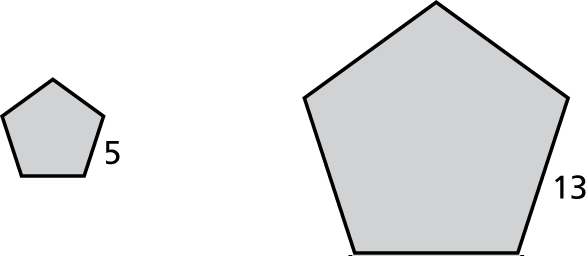
d. The side lengths of Triangle *A* are increased by 40%. The side lengths of Triangle *B* do not change. What is the new ratio of the area of Triangle *A* to Triangle *B*?

Name Date

Practice B

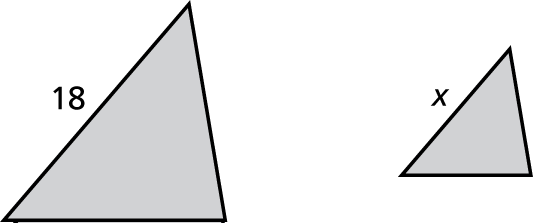
2.6

1. The two figures are similar. Find the ratio (small to large) of the perimeters and of the areas.

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2. How does tripling the side lengths of a pentagon affect its perimeter?

3. The figures are similar. The ratio of the perimeters is 12 : 7. Find *x*.



4. The ratio of the corresponding side lengths of two similar parallelogram signs is 9 : 14.

a. What is the ratio of the perimeters?

b. What is the ratio of the areas?

c. One side length of the smaller sign is 45 feet. What is the side length of the corresponding side of the larger sign?

5. A window is put in a door. The window and the door are similar rectangles. The door has a width of 4 feet. The window has a width of 30 inches.

a. How many times greater is the area of the door than the area of the window?

b. The area of the door is 32 square feet. What is the area of the window?

c. What is the perimeter of the window?

6. The area of Circle P is  The area of Circle Q is 

a. What is the ratio of their areas?

b. What is the ratio of their radii?

c. The radius of Circle Q is decreased by 50%. What is the new circumference of Circle Q?